

L 27528-66

ACC NR: AP6007755

and it is stated as a corrolary that any polyharmonic function in the sphere (V) can also be expanded in this series. This report was presented by Academician AN UkrRSR Yu. O. Mytropol's'kyy (Yu. A. Mitropol'skiy). Orig. art. has: 14 formulas.

SUB CODE: 12/      SUBM DATE: 18Nov64/      ORIG REF: 003/      OTH REF: 002

Card 2/2      *B.L.G.*

SMIRNOV, N.V., gornyy inzh.; KARMAZIN, V.V., gornyy inzh.; SUKHAREV, V.I.,  
tekhnik-obogatitel'

Industrial experience in using 2VK-5V separators. Gor. zhur.  
no.4:43-44 Ap '60. (MIRA 14:6)

1. Tsentral'naya obogatitel'naya fabrika rudoupravleniya im.  
40-letiya Oktyabrya, trest Nikopol'-Marganets.  
(Separators(Machines))

KARMAZIN, V.V., aspirant

Obtaining extra high-grade concentrates of iron ores. Nauch. soob.  
IGD 16:149-155 '62. (MIRA 16:8)

(Iron ores) (Ore dressing)

KARMAZIN, V.V., inzh.

Modern methods of obtaining super-rich iron ores concentrates.  
Nauch. soob. IGD 19:90-100 '63. (MIRA 17:2)

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AVAILABLE: Library of Congress.

Card 1/1

KARADIN, L. N.

DISCUSSION: -- "Jacobi Polynomials and the Calculation of the Isolated Values of Special Functions." *Sov. Phys-Tech. Sci. Mathematics Inst. Acad. Sci. USSR*, 24 Jun 64. (Vestnik Akad. Nauk SSSR, Moscow, 15 Jun 64)

SO: 340 011, 23 Dec. 1964

KARMAZINA, L. N.

✓ Karmazina, L. N. Tablitsy polinomov Yakobi. [Tables of Jacobi polynomials.] Izdat. Akad. Nauk SSSR, Moscow, 1954. 250 pp. 27.90 rubles.  
The polynomials tabulated are defined by

62

1 - F/W

$$G_n(p, q, x) = \sum_{j=0}^n (-1)^j \binom{n}{j} \frac{(q+n+1)^{(n)} (p+2n-1)^{(n)}}{(p+q+2n)^{(n)}} x^{n-j},$$

where  $x^{(n)} = x(x-1)\dots(x-j+1)$ . They are orthogonal with respect to the weight function  $x^{p-1}(1-x)^{q-1}$  on the interval  $(0, 1)$  and have leading coefficient unity. A short introduction gives some asymptotic formulae and recurrence relations by means of which the values of the functions can be obtained for a wider range of the parameters  $n, p, q$ . The behavior of  $G_n(p, q, x)$  for fixed  $p$ , for fixed  $q$  and for fixed  $x$  is indicated graphically.

(over)

KARMAZINA, L.N.

The main tables are to 7D and given  $G_n(p, q, x)$  for  $n=1(1)5$ ;  $p=1.1(1)3$ ;  $q=0.1(1)1$  and  $x=0(.01)1$ ; they are clearly printed. The 500 values corresponding to a fixed  $p$  and a fixed  $q$  are given on one page. The coefficients of the polynomials are given to 7S and their zeros are given to 7D for the above values of  $p, q$ . When  $p=q=1$  these polynomials reduce to the Legendre polynomials (based on the interval  $(0, 1)$ ): information about the values, coefficients and zeros of these are given in the same detail as in the general case.

The table has been constructed by using the Newton-Gauss expression for  $G_n(p, q, x_0 + ah)$  in terms of  $G_n(p, q, x_0)$  and its differences, starting from  $x_0 = 0$ . A check is obtained from the value of  $G_n(p, q, 1)$ . There are remarks on interpolation with respect to  $x, p, q$ .

*John Todd.*

2/2

Karmazina, L.N.

Karmazina, L. N. - Certain properties of the roots of Jacobi polynomials. *Vysal. Mat. Vopr. Tehn.* 2, 108-110 (1953) (Russian) 1 - F/W

$G_n(\rho, q, x)$ ,  $n = 0, 1, \dots$ , being the orthogonal polynomials belonging to the weight function  $x^{-\rho}(1-x)^{-q}$  on the interval  $(0, 1)$ ; the author proves that  $G_n(\rho, q, x)$  and  $G_{n+1}(\rho, q, x)$  have no common zeros; that at a zero of  $G_n(\rho, q, x)$ , the polynomials  $G_{n-1}(\rho, q, x)$  and  $G_{n+1}(\rho, q, x)$  have opposite signs; that given  $\epsilon$  ( $0 < \epsilon < 1$ ),  $\rho$ , and  $q \in \mathbb{R}$ , it is possible to choose  $\rho, q$  so that  $G_n$  has a zero in  $(0, \epsilon)$  or  $(1-\epsilon, 1)$ ; that given  $\rho, \epsilon$ , and a sufficiently large  $\rho$ , it is possible to choose  $q$  so that  $G_n = 0$ . A. Erdelyi (Pasadena, Calif.)

gud  
LFT

KARMAZINA, L. N.

*V*  
*W*  
Karmazina, L. N. On a method of computation of the  $\Gamma$ -B/F/W  
hypergeometric function. Vychisl. Mat. Vychisl. Techn. 2,  
111-115 (1977). (Russian)

In order to compute  $F(a, b, c, s)$ , the author proposes the  
numerical evaluation of the integral

$$\int_0^1 x^{a-1} (1-x)^{b-1} (1-cx)^{-s} dx$$

by Gauss-Jacobi mechanical quadrature based on the  
orthogonal polynomials associated with the weight function  
 $x^{a-1} (1-x)^{b-1} (1-cx)^{-s}$ . [cf. Karmazina, MR 16, 959] The paper  
contains estimates of the error term, and 61) tables of the  
Christoffel numbers and the zeros of the orthogonal poly-  
nomials for  $a=5, b=1(2), c=1.1(1)3$ .

A. Erdlyi.

Small

Left

~~KARMAZINA, Lena Nikolayevna; KUROCHKINA, Liana Vasil'yevna; DITKIH, V.A.~~  
professor, otvetstvennyy redaktor; MAKUNI, Ye.V., tekhnicheskii  
redaktor

[Tables for interpolation of coefficients] Tablitsy interpolatsion-  
nykh koefitsientov. Moskva, Izd-vo Akad. nauk SSSR, 1956. 365 p.  
(Interpolation) (Mathematics--Tables, etc.) (MIRA 10:4)

KARMAZINA, L. N., Cand. in Phys. Math. Sci.

"Calculation of Tables by Means of Machines" a paper presented at the Conference on Methods of Development of Soviet Mathematical Machine-Building and Instrument-Building, 12-17 March 1956.

Translation No. 596, 8 Oct 56

KARMAZINA, L.N.

18(0) 23(2)

SPACE I BOOK EXPLOITATION

807/3365

Akademiya nauk Azerbaydzhanskoj SSR

Tezisy dokladov Sovmehkhaniya po vychislitel'noj matematike i primeneniya  
 sredstv vychislitel'noj tekhniki (Outlines of Reports of the Conference On  
 Computational Mathematics and the Use of Computer Techniques) Baku, 1958.  
 63 p. 400 copies printed.

Additional Sponsoring Agencies: Akademiya nauk SSSR. Vychislitel'nyy tsentr,  
 and Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.

No contributors mentioned.

**PURPOSE:** This book is intended for pure and applied mathematicians, scientists,  
 engineers and scientific workers, whose work involves computation and the use  
 of digital and analog electronic computers.

**COVERAGE:** This book contains summaries of reports made at the Conference on  
 Computational Mathematics and the Application of Computer Techniques.  
 The book is divided into two main parts. The first part is devoted to  
 computational mathematics and contains 19 summaries of reports. The second  
 section is devoted to computing techniques and contains 20 summaries of  
 reports. No personalities are mentioned. No references are given.

Alekserov, S.A. Mathematical Description of Transient Processes in Nonlinear Electromagnetic Systems	11
Khatiasvili, I.M. The Almansi-Mitchell Problem for a Beam Forced By Two Concentric Circular Cylinders of Various Materials	12
Karmanina, L.N. The Work of the Mathematical Tables Branch of the Computing-Center at the Academy of Sciences, USSR	13
Gasanov, A.M. Solution of the Fundamental Problem of the Filtration of Gas-containing Petroleum by Relaxation Methods	14
Yerzhev, A.F., and V.M. Erochkin. Automatic Programming, the Contemp- orary State, Fundamental Problems	15
Velikanova, T.M., and A.F. Yerzhev, E. V. Kim, V.M. Erochkin, M. A. Olaynik-Ovodi, and V. D. Podderyugin. Computer Programming Routine for the "Strela" Computer (PFS)	16

Card 3/4

~~KARMAZINA, Lena Nikolayevna;~~ GHISTOVA, Emiliya Aleksandrevna;  
DITKIN, V.A., prof., otv. red.; YAKOVKIN, M.V., red.;  
ZELENKOVA, Ye.V., tekhn.red.

[Tables of Bessel's functions for an imaginary argument and  
their integrals] Tablitsy funktsii Besselia et maimogo argu-  
menta i integralov et nikh. Moskva, Izd-vo Akad.nauk SSSR,  
1958. 328 p. (Matematicheskie tablitsy) (MIRA 11:12)  
(Bessel's functions)

KARMAZINA, L.N.

16(0) P. 4 PHASE I BOOK EXPLOITATION SOV/3342

Akademiya nauk SSSR. Vychislitel'nyy tsentr

Vychislitel'naya matematika (Computer Mathematics) Moscow, Izd-vo AN SSSR, 1959. 148 p. (Series: Its: Sbornik, 5) Errata slip inserted. 3,200 copies printed.

Resp. Ed.: V. A. Ditkin, Professor; Ed.: M. V. Yakovkin; Tech. Ed.: S. G. Markovich.

PURPOSE: This book is intended for applied mathematicians, scientific workers, engineers and scientists whose work involves computation.

COVERAGE: This book contains 9 articles on problems in computer mathematics. Three articles are devoted to problems of nomography. There are individual articles on the numerical integration of first order ordinary differential equations, the approximate integration of multiple integrals, random values with arbitrary distribution, stochastic processes and the Monte Carlo method,

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Computer Mathematics

and the finding of the original function when its transform is a proper rational fraction. References accompany each article.

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## Computer Mathematics

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Vilenkin, N. Ya. On the Approximate Computation of Multiple Integrals	58
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Borisov, S. N. On the Nomograms With Tangential Contact for Some Empirical Relationships	79

Card ~~4/7~~

ZHURINA, Mariya Ivanovna; KARMAZINA, Lena Nikolayevna; DITKIN, V.A., prof.,  
otv.red.; YAKOVKIN, M.V., red.; VOLKOVA, V.V., tekhn.red.

[Tables of the Legendre functions  $P_{-\frac{1}{2}} + i\tau(x)$ ] Tablitsy funktsii  
Legendra  $P_{\frac{1}{2}} - i\tau(x)$ . Moskva, Izd-vo Akad.nauk SSSR. Vol.1. 1960.  
318 p. (MIRA 14:5)

(Legendre's functions--Tables, etc)

20154

S/558/60/000/006/001/006  
E032/E514

16,6500 16.4/00

AUTHOR: Karmazina, L. N.TITLE: Asymptotic Formulae for the Function  $P_{-\frac{1}{2} + i\tau}(x)$   
when  $\tau \rightarrow \infty$ PERIODICAL: Akademiya nauk SSSR. Vychislitel'nyy tsentr.  
Vychislitel'naya matematika; sbornik, No.6, 1960,  
pp. 3-16TEXT: The spherical Legendre functions  $P_{-\frac{1}{2} + i\tau}(x)$  are

being widely used in mathematical physics. The calculation of the values of this function from existing formulae is rather laborious, particularly for large  $\tau$ . The only existing tables (Zhurina and Karmazina, Ref.4) cover a wide range of  $\tau$ -values but are incomplete as regards the range of  $x$ -values. Fok (Ref.2) has given the first two terms of the asymptotic expansion of the above function in terms of the Bessel functions  $J_n(x)$  for  $\tau \rightarrow \infty$  and  $1 \leq x < \infty$ . The present author derives the next two terms in this expansion. The same method is used to derive the analogous asymptotic expansion which holds in  $-1 < x \leq 1$ . Tables are given of the coefficients in

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Asymptotic Formulae for the Function  $P_{-\frac{1}{2} + i\tau}(x)$  when  $\tau \rightarrow \infty$

these expressions which should simplify the calculation of  $P_{-\frac{1}{2} + i\tau}(x)$  in a wide range of x-values. The derivation of the asymptotic expression for the above function when  $\tau \rightarrow \infty$  and  $1 \leq x < \infty$  is based on the integral representation

$$P_{-\frac{1}{2} + i\tau}(x) = P_{-\frac{1}{2} + i\tau}(\text{ch } \theta) = \frac{2}{\pi} \int_0^{\theta} \frac{\cos \tau t}{\sqrt{2(\text{ch } \theta - \text{ch } t)}} dt. \quad (1)$$

The asymptotic formula is found to be

$$P_{-\frac{1}{2} + i\tau}(\text{ch } \theta) = \frac{\bar{A}_0(\theta)}{\tau} J_0(\tau\theta) + \frac{\bar{A}_1(\theta)}{\tau} J_1(\tau\theta) + \frac{\bar{A}_2(\theta)}{\tau^2} J_2(\tau\theta) + \frac{\bar{A}_3(\theta)}{\tau^3} J_3(\tau\theta) + \dots \quad (6)$$

where  $J_n(x)$  is the Bessel function of the first kind and  
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Asymptotic Formulae for the Function  $P_{-\frac{1}{2} + i\tau}(x)$  when  $\tau \rightarrow \infty$

$$\bar{A}_n(\theta) = (2n - 1)!! e^n \sqrt{\frac{\theta}{\text{sh}\theta}} P_n(\theta).$$

The series converges for  $\theta < 2\pi\sqrt{2 + \sqrt{5}}$ . For other values of  $\theta$  the series diverges but can be looked upon as an asymptotic series for large  $x$ . Eq. (6) can be reduced to a more convenient form by expressing  $J_n(x)$  for  $n \geq 2$  in terms of  $J_0(x)$  and  $J_1(x)$  with the aid of well known recurrence formulae. The result is

$$P_{-\frac{1}{2} + i\tau}(\text{ch } \theta) = J_0(\tau\theta) \left\{ \bar{A}_0(\theta) - \frac{\bar{A}_2(\theta)}{\tau^2} - \frac{4\bar{A}_4(\theta)}{\tau^4} + \dots \right\} + J_1(\tau\theta) \left\{ \frac{\bar{A}_1(\theta)}{\tau} + \frac{2\bar{A}_3(\theta) - 0\bar{A}_5(\theta)}{\tau^3} + \frac{8\bar{A}_5(\theta)}{\tau^5} + \dots \right\}; 0 \leq \theta < \infty. \quad (7)$$

The table appended to this paper gives the values of  $\theta = \text{arch } x$ ,  $\bar{A}_0(\theta)$ ,  $\bar{A}_1(\theta)$ ,  $\bar{A}_2(\theta)$  and  $\bar{A}_3(\theta)$  for  $x$  between 1.01 and 3 (in steps of 0.01), 3 and 5 (in steps of 0.05) and 5 and 10 (in steps of 0.1).  
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S/558/60/000/006/001/006  
E032/E514

Asymptotic Formulae for the Function  $P_{-\frac{1}{2} + i\tau}(x)$  when  $\tau \rightarrow \infty$

The values quoted are given to seven decimal places. The analogous asymptotic expression for  $P_{-\frac{1}{2} + i\tau}(x)$  when  $\tau \rightarrow \infty$  and

$-1 < x \leq 1$  is

$$P_{-\frac{1}{2} + i\tau}(\cos \theta) = I_0(\tau\theta) \left\{ A_0(\theta) + \frac{A_2(\theta)}{\tau^2} - \frac{4A_4(\theta)}{\tau^4} + \dots \right\} + I_1(\tau\theta) \left\{ \frac{A_1(\theta)}{\tau} - \frac{2A_3(\theta) - 8A_5(\theta)}{\tau^3} + \frac{8A_7(\theta)}{\tau^5} + \dots \right\}, \quad 0 \leq \theta < \pi, \quad (8)$$

where

$$\begin{aligned} A_0(\theta) &= \sqrt{\frac{\theta}{\sin \theta}}, \\ A_1(\theta) &= \frac{1}{180} \sqrt{\frac{\theta}{\sin \theta}} (9 \operatorname{ctg} \theta - 1), \\ A_2(\theta) &= \frac{1}{1280^2} \sqrt{\frac{\theta}{\sin \theta}} (90^2 \operatorname{ctg}^2 \theta + 60 \operatorname{ctg} \theta - 15 + 8\theta^2), \\ A_3(\theta) &= \frac{5}{10240^2} \sqrt{\frac{\theta}{\sin \theta}} (150^2 \operatorname{ctg}^2 \theta + 270^2 \operatorname{ctg} \theta + 160^2 \operatorname{ctg} \theta + 210 \operatorname{ctg} \theta + 240^2 - 63). \end{aligned} \quad (9)$$

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E032/E514

Asymptotic Formulae for the Function  $P_{-\frac{1}{2} + i\tau}(x)$  when  $\tau \rightarrow \infty$

The series given by Eq. (8) converges for  $0 < \theta < \pi$ . A table is appended giving the values of  $\theta = \arccos x$ ,  $A_0(\theta)$ ,  $A_1(\theta)$ ,  $A_2(\theta)$  and  $A_3(\theta)$  for  $x$  between  $-0.9$  and  $0.99$  (in steps of  $0.01$ ). The values are given to seven decimal places. The accuracy of these tables is as follows: the first table is correct to 3 to 5 decimal places for  $1 < \tau < 10$ , 5 to 7 decimal places for  $10 < \tau < 30$  and at least 7 decimal places for  $\tau > 30$ . In the case of the second table, the figures are correct to 3 to 5 significant places for  $1 < \tau < 10$ , 5 to 7 significant places for  $10 < \tau < 30$  and more than 7 significant places for  $\tau > 30$ . As  $x$  approaches  $-1$  the accuracy deteriorates. Acknowledgments are expressed to the following persons at the Vychislitel'nyy tsentr. AN SSSR (Computational Center of the AS, USSR): N. N. Akopyan, M. I. Zhurin and Ts. D. Lomkats who took part in the computations. There are 2 tables.

Card 5/5

ZHURINA, M.I.; KARMAZINA, L.N.; DITKIN, V.A., prof., otv. red.;  
ORLOVA, I.A., red.; KORKINA, A.I., tekhn. red.

[Tables and formulas for the spherical functions  $P_{-1/2+i\tau}^m(z)$

Tablitsy i formuly dlia sfericheskikh funktsii  $P_{-1/2+i\tau}^m(z)$

Moskva, Vychislitel'nyi tsentr AN SSSR, 1962. 55 p.  
(Functions) (Mathematics--Tables, etc.) (MIRA 15:12)

ZHURINA, Mariya Ivanovna; KARMAZINA, Lena Nikolayevna; DITKIN, V.A.,  
prof., otv. red.

[Tables of Legendre's functions  $P_{-\frac{1}{2}} + i\tau(x)$ ] Tablitsy funktsii  
Lezhandra  $F_{-\frac{1}{2}} + i\tau(x)$ . Moskva, Izd-vo Akad. nauk SSSR. Vol.2.  
1962. 413 p.

(MIRA 15:12)

(Legendre's functions) (Mathematics--Tables, etc.)

ZHURINA, M.I.; KARMAZINA, L.N.; DITKIN, V.A., prof., otv. red.;  
ORLOVA, I.A., red.; POPOVA, N.S., tekhn. red.

[Tables of Legendre's functions  $P_{l-1/2+i\tau}(x)$ ]

Tablitsy funktsii Lezhandra  $P_{l-1/2+i\tau}(x)$ .

Moskva, Vychislitel'nyi tsentr AN SSSR, 1963. 404 p.  
(Legendre's functions) (MIRA 16:7)

SOSNOVA, P.S.; BARBALAT, S.D.; KARMAZINA, N.Ya.; ROGOL', M.G.

Some current problems of pneumonia in infants. Zdravookhranenie  
5 no.3:11-16 My-Je '62. (MIRA 16:1)

1. Iz kafedry fakul'tetskoy i gospital'noy pediatrii (zav.  
dotsent P.S.Sosnova) Kishinevskogo meditsinskogo instituta.  
(PNEUMONIA) (INFANTS—DISEASES)

YUKHNO, V.P.; KARMAZINA, N.Ya.; ROGOL', M.G.

Colibacillosis in infants. Zdravookhranenie 5 no.3:20-24 My-Je  
'62. (MIRA 16:1)

1. Iz kafedry gospital'noy i fakul'tetskoy pediatrii (zav. -  
dotsent P.S.Sosnova) Kishinevskogo meditsinskogo instituta i  
Detskoj respublikanskoy klinicheskoy bol'nitsy (glavnyy vrach  
S.S.Strungaru).

(ESCHERICHIA COLI) (INFANTS--DISEASES)

AUTHORS: Peysakhov, I.L. and Karmazina, V.D. SOV/86-50-1-12/44  
 TITLE: Tension of  $SO_2$  Above Zinc Bisulfite Solutions (Upruzheniye  $SO_2$   
 nad rastvorami bisul'fita tsinka)  
 LITERATURE: Zhurnal prikladnoy khimii, 1959, No 1, pp. 70-74 (USSR)

ABSTRACT: A method of purifying metallic lead gases from sulfur dioxide  
 was developed in the Gintsvet, et under the supervision of the  
 authors of this paper. This method makes use of the pulp con-  
 taining zinc oxide and zinc sulfate. In order to design the  
 corresponding equipment and to develop technological con-  
 ditions for this process, it is necessary to know the tension  
 of  $SO_2$  gas above the pulp containing  $ZnSO_3$  in the residue and  
 $Zn(HSO_3)_2$  in the solution. The measurement of the equilibrium  
 tension of  $SO_2$  above the aqueous solutions of zinc bisulfite  
 and zinc sulfate was performed by the usual analytical method.  
 The results of the measurements led to the following con-  
 clusions: 1. The tension of  $SO_2$  above the pulp containing  
 $ZnSO_3$ ,  $ZnSO_4$  and  $Zn(HSO_3)_2$  depends on temperature in accor-  
 dance with the Clapeyron-Clausius equation, on the total  
 $SO_2$  concentration in the solution and on the concentration of  
 $ZnSO_3$ ; 2. The pH-value of the solutions can be expressed by  
 the formula:  $pH = 4.5 - 0.2 \lg c_{ZnSO_4} - 0.345 c_{SO_2, tot}$  for  
 pH-values lesser than 4, and by the formula:

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Tension of SO<sub>2</sub> Above Zinc Bisulfite Solutions

SO<sub>2</sub> (20-25-30-35-40-45-50)

$pH = 9.5 - 0.005 c_{ZnSO_3} - 2.5 \log_{10} c_{SO_2}$  for the higher pH-values.

1. The tension of SO<sub>2</sub> can be calculated by the formula:  $\lg p_{SO_2} = 1.4 - 1.15 \lg c_{SO_2} - \frac{19.4}{T}$  for ZnSO<sub>3</sub>

concentration lower than 1.5% by the formula:

$\lg p_{SO_2} = 2.15 + 1.75 \lg c_{SO_2} - 1.15 \lg c_{ZnSO_3} - \frac{20.5}{T}$  for

higher concentrations. At the pH-value lower than 4.8 the p-value can be calculated in all cases by the formula:

$\lg p_{SO_2} \approx 9.25 - 1.25 pH - \frac{1300}{T}$ .

There are 7 graphs, 1 diagram, 2 tables and 1 Soviet reference.

CONTINUED:

February 11, 1957

Card 2/2

PEYSAKHOV, I.L.; SLOWIMSKIY, B.I.; KARMAZINA, V.D.

Volatilization and recovery of lead during the chloridizing  
roasting of iron concentrates. Sbor. nauch. trud. Gintsvetmeta  
no.19:565-576 '62. (MIRA 16:7)

(Ore dressing) (Lead--Metallurgy)

PEYSAKHCHY, I.L.; GINODMAN, G.M.; KARMAJINA, I.M.

Gas purification from chlorine by lime milk on a S.G. scrubber. Stor. nauch. trad. Gintsvetmet's n. 20.131.170. 1972  
(MIRA 17:12)

KUZMAK, Ye.M.; MILANCHEV, V.S.; KARMAZINOV, N.P.

Reaction to the heat ranging of welding of improved low-alloy  
19G and 14GN steels. Izv.vys.ucheb.zav.; neft' i gaz 5 no.2:  
101-108 '62. (MIRA 15:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti  
imeni akademika I.M. Gubkina.

(Steel--Welding)

(Metals, Effect of temperature on)

DEKABRIN, L. I. CHERNOMIRSKY, A.M., nauchn. red.

[Amplifiers and power supply sources] Usiliteli i istochniki pitaniya; uchebnoe posobie. Moskva, Rosvuzizdat.  
Pt.2. 1961. 200 p. (MIRA 18:3)

L 13796-65

ACCESSION NR: AP4047238

S/0142/64/007/004/0419/0429

AUTHOR: Karmazinakiy, A. N.

TITLE: Unitron symmetrical trigger

SOURCE: IVUZ, Radiotekhnika, v. 7, no. 4, 1964, 419-429

TOPIC TAGS: unitron, unipolar transistor, field effect transistor, unitron trigger

ABSTRACT: Static conditions of functioning are theoretically considered; the reliability of cutoff is assessed; d-c loading of the trigger is analyzed. These conclusions are offered: (1) The symmetrical unitron trigger combines some features of both the electron-tube and the transistor triggers; hence, its operation should be analyzed with (a) the p-n gate-source junction reverse-biased and (b) the p-n junction forward-biased; (2) It is recommended that the supply voltages exceed the cutoff voltages by at least twice; (3) The two supply voltages are minimum when they are equal; the supply voltage is limited by a

Card 1/2

L 13793-65

ACCESSION NR: AP4047239

S/0142/64/007/004/0430/0437

AUTHOR: Karmazinskiy, A. N.

TITLE: Analysis of static conditions of a trigger with direct-coupled unitrons

SOURCE: IVUZ. Radiotekhnika, v. 7, no. 4, 1964, 430-437

TOPIC TAGS: unitron, unipolar transistor, field effect transistor, unitron trigger

ABSTRACT: A theoretical analysis of a direct-coupled-unitron trigger is presented; approximate formulas for computing the drain and drain-gate characteristics are developed; an  $N_r$ -shaped trigger characteristic is analyzed; trigger operating points and series resistances are determined; an allowance is made for the leakage current, reverse current, supply-voltage and cutoff-voltage variations; trigger balancing is considered. These conclusions are offered:  
(1) The condition (14) permits determining the optimal load which depends on the supply voltage and the tolerances on the parameters of unitrons and circuit;

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L 13793-65

ACCESSION NR: AP4047239

(2) The optimal load is characterized by the maximum current of the  $N_T$ -shaped trigger characteristic and the  $N_s$ -shaped unitron characteristic; (3) The analysis permits an allowance for the asymmetry of unitron parameters. Orig. art. has: 5 figures and 30 formulae.

ASSOCIATION: none

SUBMITTED: 14Feb64

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 002

Card 2/2

L 55230-65 EWT(d)/EED-2/EWP(1) Pg-4/Pg-4/Pk-4 IJP(c) BE/GG

ACCESSION NR: AT5004897

S/2657/64/000/012/0244/0263  
621.382.322;681.142.67

33  
BT/

AUTHOR: Basiladze, S. G.; Karmazinskiy, A. N.; Malin, B. V.

TITLE: Logical circuits and a half-adder using field-effect transistors

SOURCE: Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, no. 12, 1964, 244-263

TOPIC TAGS: logical circuit, halfadder, transistor, field effect transistor

ABSTRACT: Generalities on thin-film microminiature field-effect transistors after W. Shockley (Proc. IRE, 1952, v. 40, no. 11) and A. V. J. Martin (Semiconductor Products, 1962, no. 2-3) are explained, as well as simple logical circuits such as AND, OR, NOT. A low forward transmittance and high cutoff voltage are cited as the main shortcomings of today's field-effect transistors. Logical circuits with these transistors can operate at a clock frequency of 100 kc or lower. Two experimental half-adders were built, one with p-type and n-type

Card 1/2

1. 55230-65

ACCESSION NR: AT5004897

transistors, and the other with all transistors of the same type. The integral-type half-adder circuit operated correctly at  $\pm 20\%$  variation of the supply voltage and  $\pm 5\%$  variation of the input-signal amplitude. Orig. art. has: 15 figures, 20 formulas, and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 60

SUB CODE: DP, EC

NO REF SOV: 001

OTHER: 003

Card 2/2

L 63853-65 EMT(1)/EEG(k)-2/T/EEG(b)-2/EWA(h) IJP(c)

ACCESSION NR: AP5014891

UR/0142/65/008/002/0250/0281  
621.382.2/3

14  
B

AUTHOR: Karmazinskiy, A. N.

TITLE: Effect of frequency on transconductance in unitrons

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 2, 1965, 280-281

TOPIC TAGS: unitron, unipolar transistor, field effect transistor

25,44

ABSTRACT: It is theoretically shown that the increase in the measured unitron transconductance should be explained by a direct passing of a part of the input signal to the output. Experiments prove that the unitron transconductance is frequency-independent up to at least 10 Mc. Orig. art. has: 2 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 22Oct64

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 005

Card <sup>dm</sup> 1/1

L 63853-65 EWT(1)/ERC(k)-2/T/REC(b)-2/EDA(h) IJF(c)

ACCESSION NR: AP5014891

UR/0142/65/008/002/0280/0281  
621.382.2/3

14  
B

AUTHOR: Karmazinskiy, A. N.

TITLE: Effect of frequency on transconductance in unitrons

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 2, 1965, 280-281

TOPIC TAGS: unitron, unipolar transistor, field effect transistor 25,44

ABSTRACT: It is theoretically shown that the increase in the measured unitron transconductance should be explained by a direct passing of a part of the input signal to the output. Experiments prove that the unitron transconductance is frequency-independent up to at least 10 Mc. Orig. art. has: 2 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 23Oct64

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 005

Card 1/1

L 5269-66 EWT(1)/EWA(h)

SOURCE CODE: UR/0142/65/008/004/0489/0493

ACC NR: AP5026202

AUTHOR: Karmazinskiy, A. N.; Hemchinov, V. M.

ORG: none

39  
23

TITLE: Unitron counter

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 4, 1965, 489-493

TOPIC TAGS: counter, adder, field effect transistor, direct coupled transistor logic

ABSTRACT: An experimental direct-coupled transistor logic counter using unitrons (field-effect transistors) is described. A block diagram is given in Fig. 1, and

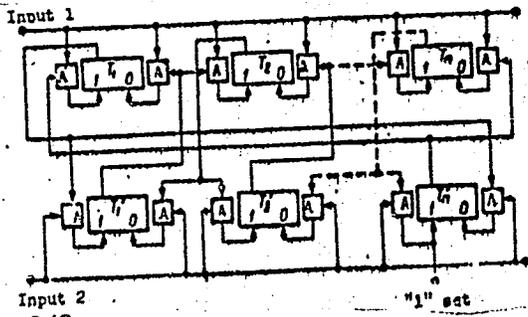


Fig. 1. Unitron ring counter

A - AND gates; T - triggers.

UDC: 621.382.233

Card 1/3

6901 1190

L 5259-66

ACC NR: AP5026202

Fig. 2 is a schematic for two digits of a ring counter. In the absence of storage

2

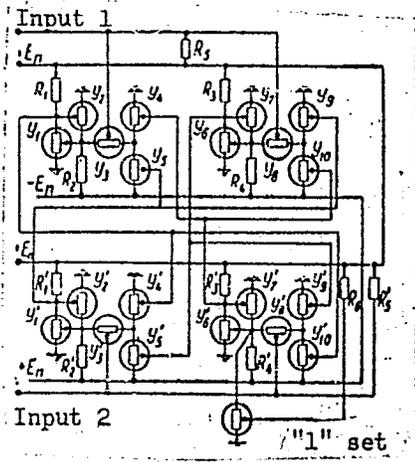


Fig. 2. Two digits of ring counter

elements, the delay function in counting is provided by auxiliary trigger FET's ( $T'_1, T'_2 \dots$  in Fig. 1). Tabulated results are given of the range of tolerance in circuit parameters for a counter operating at 18C and 40C. Operation was reliable over a 15% variation in supply voltage and a 10% variation in resistor values. Speed

Card 2/3

L 5269-66

ACC NR: AP5026202

of operation was a limiting factor, being in this case only 25 kc. An advantage cited is the low power drain, due to the fact that in the unitron counter only two triggers are on at any given moment; the tested counter required only 40 mw. Orig. art. has: 5 tables and 7 figures. O

[SH]

SUB CODE: DP, EC/ SUBM DATE: 22Oct64/ ORIG REF: 002/ ATD PRESS: 4/37

OC  
Card 3/3



L 20451-66

ACC NR: AT6008790

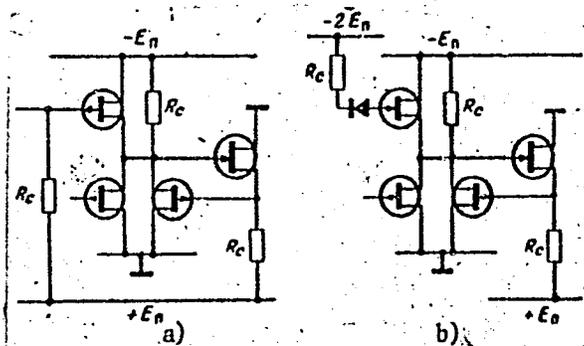


Fig. 1. Set and reset circuits

be the absence of errors when bit combinations 11 and 01 were circulated. The register performed satisfactorily with individual bias voltage fluctuations of  $\pm 20\%$ , combined bias voltage fluctuations of  $\pm 10\%$ , input-signal variations of 15%, and resistance variations in the drain circuit of  $\pm 50\%$ . The maximum working frequency for the register based on Fig. 1a was 30 kc; for the one based on Fig. 1b was 43 kc. At 20 C, the fan-out was 4-5. The speed of the shift register may be increased by a

Card 2/3

J. 20151-66

ACC NR: AT6008790

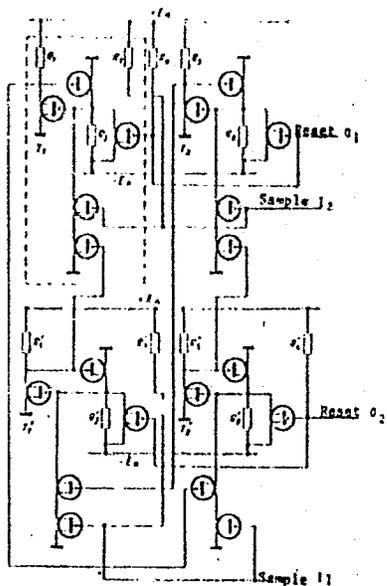


Fig. 2. Two-stage shift register

factor of 10--15 if field-effect transistors with transconductance of 1 mamp/v are used instead of those with transconductance of 0.1--0.4 mamp/v. Orig. art. has: 10 figures. [BD]

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS: 4222  
Card 3/3 *mjs*

KARMAZINU, V. (Rumyniya)

Active use of environmental factors in the sanatorium park. Vop.  
kur., fizioter. i lech. fiz. kul't. 25 no.4:355-360 J1-Ag '60.  
(MIRA 13:9)

(THERAPEUTICS, SUGGESTIVE)

(LANDSCAPE GARDENING)

*KARMAZINOV, N.P.*

137-58-5-9735 D

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 126 (USSR)

AUTHOR: Karmazinov, N.P.

TITLE: An Investigation of the Process of Formation of a Weld in the Automatic Welding of Two Layers of Rolled Metal for Petroleum Apparatus (Issledovaniye protsessa obrazovaniya svarnogo soyedineniya pri avtomaticheskoy svarke dvukhsloynogo prokata v nef-teapparature)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Mosk. neft. in-t (Moscow Petroleum Institute), Moscow, 1957

ASSOCIATION: Mosk. neft. in-t (Moscow Petroleum Institute), Moscow

1. Metals--Welding 2. Welding--Analytic

Card 1/1

KARMAZINOV, N. P.

135-7-2/16

SUBJECT: USSR/Welding

AUTHORS: Kuzmak, Ye.M., Professor, Doctor of Technical Sciences, and  
Karmazinov, N.P., Engineer.

TITLE: Investigation of Weldability and Welding Technology of Two-Layer  
Rolled Material. (Issledovaniye svarivayemosti i tekhnologii  
svarki dvukhsloynogo prokata).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 7, pp 5-9 (USSR)

ABSTRACT: The weldability and welding technology of two-layer rolled steel  
composed of grades "MCT.3" and "08X12", its reaction to the  
thermic cycle of the welding operation, the process of mixing  
during welding, the technology of controlling the amount of the  
base metal in the weld, and the technology of automatic-welding  
two layers were investigated. The tough-melting flux composed  
of 90 % magnesite, 8 % water glass, and 2 % water gave satisfac-  
tory results. The chemical composition of metals concerned "MCT.3"  
"08X12", "CB-X25H20", "CB-X5H13", and "CB-0X18H9" are speci-  
fied. The distribution of the elements under observation was  
investigated by the radiogram method, which shows the distribu-  
tion over the entire cross section of the weld. Sulfur-35 has  
been used as radioactive isotope. The composition of the

Card 1/3

135-7-2/16

TITLE:

Investigation of Weldability and Welding Technology of Two-Layer Rolled Material. (Issledovaniye svarivayemosti i tekhnologii svarki dvukhsloynogo prokata).

electrode wire and the structure of weld metal were determined by a graphical calculation method.

The following has been determined during the investigation:

- 1) The appearance of carbon rediffusion and redistribution which leads, in particular, to formation of zones of reduced corrosion-resistance.
- 2) The degree of weld metal homogeneity in automatic welding. The nature of inclusions under conditions of incomplete mixing and their quantitative relation to the welding current and the speed of welding, the relation between the initial chemical composition of base metal and chrome-nickel wire, and the final composition of weld metal which allow the use of calculating methods for technological projecting of welding processes.
- 3) The conditions of considerable reduction of the  $\gamma$ -phase, corresponding to application of chrome-nickel wires with different "austenitic reserves" when welding with alternating current.
- 4) The technological basis for automatic welding of two-layer rolled stock in two operations without a dividing layer was proven experimentally.

Card 2/3

135-7-2/16

TITLE: Investigation of Weldability and Welding Technology of Two-Layer Rolled Material. (Issledovaniye svarivayemosti i tekhnologii svarki dvukhsloynogo prokata).

The article contains 5 diagrams, 6 photographs, 3 tables, and 9 bibliographic references (7 of which are Russian).

ASSOCIATION: Neftyanoy Institut imeni I.M. Gubkina (Petroleum Institute imeni I.M. Gubkina)

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 3/3

KARMAZINOV, N. P., (Engr.), Koshelov, N. N. (Engr.) and KUZMAK, Ye. M. (Dr. Technical Sciences, Prof.)

"Investigation of Welded Connections in Special Steel Petroleum Equipment using Radioactive Isotopes." p. 85. in book "Reports of the Interuniversity Conference on Welding, 1956, Moscow, Mashgiz, 1958, 266pp.

KARMAZINOV, N. P., Cand Tech Sci -- (diss) "Study of the Process  
of Formation of Welded Compound in Automatic Welding of <sup>Double</sup> ~~Two~~-Layer  
Rolled Iron in <sup>Petroleum</sup> ~~Oil~~ Equipment." Mos, 1957. 15 pp (Min of Higher  
Education USSR, Mos Order of Labor Red Banner Petroleum Inst in  
Academician I.M. Gubkin), 110 copies (KL, 48-57, 106)

- 29 -

ACCESSION NR: AP4012363

S/0142/63/006/006/0664/0669

AUTHOR: Karmazinskiy, A. N.

TITLE: Graphic calculation of the static mode of unipolar field effect transistor trigger circuits

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 664-669

TOPIC TAGS: field effect transistor, logical element, field effect transistor trigger, static characteristic, and gate, not gate, or gate, direct connected trigger, solid state circuit element

ABSTRACT: A method is proposed for calculating the static characteristics of unipolar field-effect transistors and the use of such transistors in solid-state logical elements of digital computers. The basic element considered is a normally closed trigger, to the input of which is applied a signal insufficient to bias the gate-channel junction of the field effect transistor in the forward direction. The calculations include the determination of criteria for signal constancy, determination of the number of cells needed to maintain the operating point constant, and the use of the developed

Card 1/2

KARMAZINSKIY, N. (g. Elektrostal')

Tent for protection against rain and cold weather. Za rul. 19  
no.4:16a Ap '61. (MIRA 14:7)

(Motorcycles)

CHINCH, N.A.; KARMAZO, V.V.

New-model rail grip for the "Staryi Burlak" crane. Rech. transp. 15  
no. 7:11 JI '56. (Floating cranes) (MIRA 9:9)

KARMAZO, V.V., inzh.

Device for turning the forks of fork lift trucks. Rech.transp.  
17 no.11:47-48 N '58. (MIRA 11:12)  
(Fork lift trucks)

KARMAZO, V.V., inzh.

Improving piston design in the hydraulic system of the 400M  
automatic loader. Rech.transp. 18 no.9:53 S '59.  
(MIRA 13:2)

1. Kiyevskiy rechnoy port.  
(Pistons) (Hydraulic machinery)

PILIPENKO, V.; KARMAZO, V.

Cargo gripping equipment for asbestos-slate pipes. Rech.transp.  
19 no.1:44-45 Ja '60. (MIRA 13:5)

1. Glavnyy inzhener Kiyevskogo porta (for Pilipenko). 2. Inzhener-  
konstruktor Kiyevskogo porta (for Karmazo).  
(Cargo handling--Equipment and supplies)

PELIPENKO, V.; KARMAZO, V., inzh.

Modernization of cranes. Rech. transp. 19 no.10:38-39 o '60.

(MIRA 13:11)

1. Glavnyy inzhener Kiyevskogo rechnogo porta (for Pelipenko).
2. Konstruktorskoye byuro Kiyevskogo rechnogo porta (for Karmazo).  
(Electric cranes)

KARMAZO, V., inzh.

Stand for the testing of cargo-grabbing devices. Mech. transp.  
20 no.8:19-20 Apr '61. (MIRA 14:10)

1. Kiyevskiy port.  
(Cargo handling) (Electric testing)

KARMAZO, V., inzh.

Lightweight coal clamshells. Rech. transp. 19 no.12:36-37 D '60.  
(MIRA 13:12)

1. Kiyevskiy rechnoy port.  
(Coal handling machinery)

DOMANOV, V. (Moskva); POKROVSKIY, F. (Moskva); KOZHUKHAREV, I. (Minsk)  
~~KARMAZONOV, A. (Chelyabinsk); POZDNYAKOV, V. (Leningrad);~~  
YEMEL'YANOV, A. (Krasnodar); PUGOVKIN, Ye. (Astrakhan');  
CHUPAKOV, A.

Suggestions of the readers. Radio no.8:55 Ag '60. (MIRA 13:9)  
(Radio)

KARMAZOV, M. G.

KARMAZOV, M. G.

AL'BOM PRINTSIPIAL'NYY SKHEM AVTOMATICHESKIKH TELEFONNYKH STANTSIIY (ALBUM OF  
PRINCIPAL DIAGRAMS OF AUTOMATIC TELEPHONE STATIONS) MOSKVA, SVYAZIZDAT, 1947.  
41 P. OF DIAGRS.  
SUPPLEMENT TO AVTOMATICHESKAYA TELEFONIYA.

N/5  
653.021  
.K18

MARMAZOV, M.G.

Avtomaticheskaya telefonija. [Automatic telephony] S prilozheniem alboma skhem.  
2. perer. izd. Dopusceno v kachestve učebnika dlja tekhnikov. Moskva, Gos.  
izd-vo lit-ry po voprosam svjazi i radio, 1947, 237 p. diagrs. Bibliografija:  
p. [235]. DLC: TK63-7.D35 1947

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress,  
Reference Department, Washington, 1952, Unclassified.

KARMAZOV, M. G.

The organization and operation of municipal telephone networks: a textbook. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1948. 152 p. (49-25879)

TK6201.K3

PARIN, V. M.G.

Avtomaticheskaya Telefoniya (Automatic Telephony) S Prilozheniyem Al'Boma  
Skhem. 3 Perer. Izd. Moskva, Svyaz'izdat, 1953.  
289 P. Diagr., Tables.

SO: N/5  
653.021  
:K1  
1953

KARMAZOV, M.G.

USSR/ Miscellaneous - Book review

Card 1/1 Pub. 133 - 20/24

Authors : Kopp, M. F., Cand. of Techn. Sc.

Title : Critique and bibliography. Book entitled, "Automatic Telephony"

Periodical : Vest. svyazi 6, page 29, June 1954

Abstract : Critical review of a textbook by M. G. Karmazov entitled, "Automatic Telephony", published in 1953 by Svyazizdat USSR, is presented. The advantages and disadvantages of the textbook are listed.

Institution : Electrotechnical Communications Institute, Odessa

Submitted : ...

*KARMAZOV, M. G.*

USSR/ Miscellaneous - Economics

Card 1/1 Pub. 133 - 8/18

Authors : Karmazov, M. G., Cand. of Tech. Sc.

Title : Production volume indications for telephone communication offices

Periodical : Vest. svyazi 2, 14 - 16, Feb 1955

Abstract : Various ways are described for estimating the productive-economical indices of local and long-distance telephone communication offices. Graphs.

Institution: .....

Submitted: .....

AUTHOR: Karmazov, M.G., Candidate of Technical Sciences, Docent SOV/111-58-3-14/29  
of MEIS

TITLE: On the Method of **Long-range** Planning of Long-Distance Telephone Networks (O metodike perspektivnogo planirovaniya seti mezhdugorodnoy telefonnoy svyazi)

PERIODICAL: Vestnik svyazi, 1958, Nr 3, p 15 - 17 (US3R)

ABSTRACT: The author explains methods for establishing the future demand of long-distance telephone calls for setting up prospective plans for expansion of the existing telephone network during the years 1959-1965. First, the demand of long-distance telephone calls is determined and subsequently the number of channels and the appropriate equipment for handling the expected load are selected. The author supports his statements by formulas and graphs and points out at the end that the methods explained in his article are not universal ones, but are merely one way of solving the problem of prospective planning. There are three graphs and one table.

ASSOCIATION: MEIS

*Moscow Electrical Engineering Inst of Communications*

Card 1/1

KARMAZOV, Mikhail Grigor'yevich; YEFIMOV, Nikolay Semenovich; METEL'SKIY, G.B., dotsent; retsenzent; FAT'KIN, D.P., dotsent, retsenzent; TRAUBENBERG, I.A., prepodavatel', retsenzent; BAZYK, V.K., prepodavatel', retsenzent; FRAYFEL'D, G.Ya., prepodavatel', retsenzent; STOYANOV, M.N., otv.red.; KAZ'MINA, R.A., red.; KARABILOVA, S.F., tekhn.red.

[Organizing and planning a local telephonic system] Organizatsiya i planirovaniye mestnoi telefonnoi svyazi. Moskva, Gos. izd-vo lit-ry po voprosam svyazi i radio, 1959. 212 p. (MIRA 12:12)

1. Kafedra Organizatsii i ekspluatatsii elektrosvyazi Moskovskogo elektrotekhnicheskogo instituta svyazi (for Fat'kin, Traubenberg).
  2. Kafedra ekonomiki svyazi Odesskogo elektrotekhnicheskogo instituta svyazi (for Basyk, Frayfel'd).
- (Telephone)

~~KARMAZOV, Mikhail Grigor'evich.~~ Prinsipali uchastiye: BABURIN, N.N.;  
GORSHKOVA, O.I.; MALYSHEVA, N.V., retsenzent; BAZYK, V.K.,  
prepodavatel'; ZAYONCHKOVSKIY, Ye.A., otv.red.; BOGACHEVA, G.V.,  
red.; SHEFER, G.I., tekhn.red.

[Organizing and planning long-distance telephone communication]  
Organizatsia i planirovanie mezhdugorodnoi telefonnoi svyazi,  
Moskva, Gos.izd-vo lit-ry po voprosam svyazi i radio, 1960. 239 p.  
(MIRA 14:3)

1. Zamestitel' nachal'nika Tsentral'noy mezhdugorodnoy telefonnoy  
stantsii (for Malysheva). 2. Odesskiy institut svyasi (for  
Bazyk).

(Telephone)

MARKOV, MIKHAIL OL'GOR'YEVICH

Organization and planning of long-distance telephone communications.  
New York, N.Y., 1971.

32 p. diagrs., graphs, tables. (SRS: 1124; TO: 1-3-8)

Translated from the original Russian: Organizatsiya i planirovaniye  
zadolgodnykh tel'fonnykh svyazi, Moscow, 1970.

Bibliography: P. 347-349

KARMAZOV, Mikhail Grigor'ievich; METEL'SKIY, Georgiy Borisovich;  
LEZERSON, V.K., otv. red.; ULANOVSKAYA, N.M., red.

[Automatic telephony] Avtomaticheskaya telefoniya. Mo-  
skva, Sviaz'izdat, 1963. 375 p. (MIRA 17:5)

KARMAZOV, M.G.

Determination of the operational capacity of municipal telephone networks. Vest. sviazi 25 no.4:28-29 Ap '65.

(MIRA 18:6)

KARMAZSIN, L.

HADHAZY, S.; LEIKES, G.; KARMAZSIN, L.

Postnatal development of the adrenal cortex. Acta morph. hung. 4  
no.2:209-215 1954.

1. Institut für Anatomie, Histologie und Embryologie der Medizinischen  
Universität, Debrecen (Vorstand: Prof. I.Krompecher)  
(ADRENAL CORTEX, anat. & histol.  
postnatal develop.)

KARMAZSIN, L.

LELKES, Gy.; KARMAZSIN, L.

Development of elastic elements in tissue cultures. Acta morph.  
hung. 5 no.1-2:149-157 1955.

1. Department of Anatomy, Histology and Embryology of the Medical  
University, Debrecen (Director: Prof. I. Krompecher).

(TISSUE CULTURE,  
develop. of elastic elements in)

KARMAZSIN, Laszlo, dr.; CSORBA, Sandor, dr.

Stomatitis complicated by malignant laryngotracheobronchitis.  
Gyermekgyogyasat 11 no.1:23-27 Ja '60.

1. A Debreceni Orvostudományi Egyetem Gyermekklinika-jának  
(Igazgató: Kulín Laszlo dr. egyetemi tanár) közleménye.  
(LARYNGITIS compl)  
(BRONCHITIS compl)  
(TRACHEA dis)  
(STOMATITIS compl)

CSORBA, Sandor, dr.; KARMAZSIN, Laszlo, dr.

Mass staphylococcal infection causing pseudocroup. *Gyermekgyógyászat*  
11 no.12:362-366 D '60.

1. A Debreceni Orvostudományi Egyetem Gyermekklinikájának (Igazgató:  
dr. Kulin Laszlo egyetemi tanár) közleménye.  
(LARYNGISMUS microbiol)  
(STAPHYLOCOCCAL INFECTIONS in inf & child)

KARMAZSIN, LASSLO

SURNAME, Given Name

Country: Hungary

Academic Degree: Dr

Affiliation: Pediatric Clinic (Gyermekeklinika) of the Debrecen Medical University  
(Debreceni Orvostudományi Egyetem). Director: professor Dr László KULIK.

Source: Budapest, Gyermekgyógyászat, Vol XII, No 7, Jul 61, pp 218-221

Date: "Osteogenesis Imperfecta."

Co-author:

KARMAZSIN, László, Dr, Pediatric Clinic of the Debrecen Medical University.

(P) 01103

SZERDAHELYI, Ferenc, dr.; KARMAZSIN, Laszlo, dr.

Gargoylism. Orv.hetil. 102 no.6:264-265 5 F'61.

1. Debreceni Orvostudományi Egyetem, Gyermekklinika.  
(LIPOCHONERODYSTROPHY case reports)

CSORBA, Sandor, dr.; KARMAZSIN, Laszlo, dr.

Osteogenesis imperfecta. Gyermekgyógyászat 12 no.7:218-221 J1 '61.

1. A Debreceni Orvostudományi Egyetem Gyermekklinikájának (Igazgató:  
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(OSTEOGENESIS IMPERFECTA case reports)

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(PEPTIDE HYDROLASES)

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(igazgató: Szelezky Gyula dr. egyetemi tanár) Röntgen Osztályának  
(vezető Rencz Antal dr. egyetemi docens) és Gyermekklinikájának  
(igazgató: Kulín Laszlo dr. egyetemi tanár) közleménye.  
(THROMBOSIS) (VENA CAVA INFERIOR)

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(MIRA 15:11)

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(Water--Purification) (Precast concrete construction)

KARMELYUK, N.S. (Stalino); LERNER, V.I. (Stalino)

Large-capacity tanks made of large reinforced concrete slabs.  
Vod. i san. tekhn. no. 8:3-9 Ag '61. (MIRA 14:9)

~~Water~~ (Tank)  
(Donets Basin—Precast concrete construction)

KARMELYUK, N.S.

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(Water--Purification)  
(Prestressed concrete construction)

KARMELYUK, N.S.

Construction of filtration plants from large elements. Prom.  
stroi. 40 no.3:7-12 '62. (MIRA 15:3)

1. Upravleniye stroitel'stva kanala Severnyy Donetsk-Donbass.  
(Filters and filtration)  
(Precast concrete construction)

KARMEN, K. N.

180742

USSR/Electricity - Piezoelectricity

Apr 51

"Piezoelectric Properties of Seignette Salt at Direct Piezo-Effect," M. S. Kosman, K. N. Karmen, Leningrad State U

"Zhur Eksper i Teoret Fiz" Vol XXI, No 4, pp 524-527

According to data from lit, direct piezo-effect modulus is 10 times smaller than the reverse. Authors show that both moduli do not differ. They point out some other erroneous assumptions on piezoelectric properties of Seignette salts.

LC

180742

KARMEY, K. N.

V A study of the anomalous dielectric properties of Seignette salt with a ballistic galvanometer. K. N. Karman. *Ucheye Zapiski Elektrotekhnicheskogo Fakul'teta*, No. 3, 118-91(1953); *Referat. Zhur.*, Feb. 1955, No. 4944. The dielec. and piezoelec. anomalies of Seignette salt were studied by alternately superimposing different voltages on a condenser contg. the seignettelec. substance. Samples were cut from single crystals in the form of slices of thickness 1-20 cm; the surface of the electrodes is oriented perpendicularly to the crystallographic axis  $x$ . The system of applying electrodes in the form of a graphite layer, although guaranteeing absence of an air layer, did not exclude the possibility of a dehydrated layer of Seignette salt, having low dielec. porosity. In this respect the most favorable condition for retaining the properties of Seignette salt is a moisture content in the air of 30-40%; samples placed in a closed container with this moisture content did not change their properties for 3 yrs. For comparison, condensers with a mica dielec. were studied, the holding capacities of which were independent of the amt. and charge of the field intensity. Condensers contg. a seignettelec. substance displayed dielec. and piezoelec. anomalies in relation to the temp. and field intensity. Polarization max. near the Curie point were observed only up to a certain intensity that was max. for the given sample. The most probable values for the Curie point were  $-18$  and  $+23^\circ$ . A polarization min. observed at several degrees above zero was characteristic. Retardation of depolarization was observed after increasing the field intensity, together with an abs. increase in  $d$ . of the charge: an increase in intensity accelerates polarization and slows depolarization. The mech. d.s. voltage along the bisectrix of the angle formed by the crystallographic axes  $y$  and  $z$  causes a piezoelec. effect. By changing the voltage it is possible to obtain a great diversity of anomalies and to change the properties of the sample considerably while keeping the temp. and moisture content uniform.

CH

V

(md) [signature]

Marjorie Ketriz

USSR/Physics - Piezoelectricity

FD-1372

Card 1/1 : Pub. 146-17/18

Author : Karmen, K. N.

Title : Nature of piezoelectricity in Rochelle salt

Periodical : Zhur. eksp. i teor. fiz., 26, 370-376, Mar 1954

Abstract : The author works out a procedure for investigating the anomalous properties of Rochelle salt (Seignette salt) by the ballastic method. He shows that the phenomenon of lagging cannot be due to the layers between the electrodes and surface of the crystal, and that the fact that the duration of the processes which occur in Rochelle salt during imposition of a field is large does not fit within the framework of existing theories on piezoelectricity. Five references, all USSR; e.g. K. N. Karmen, Dissertation, Leningrad State Pedagogic Institute imeni Gerten, 1950.

Institution : Blagoveshchensk Pedagogic Institute

Submitted : September 24, 1952

USSR/Physics - Piezoelectric

FD-2918

Card 1/1            Pub. 146 - 18/19

Author            : Karmen, K. N.

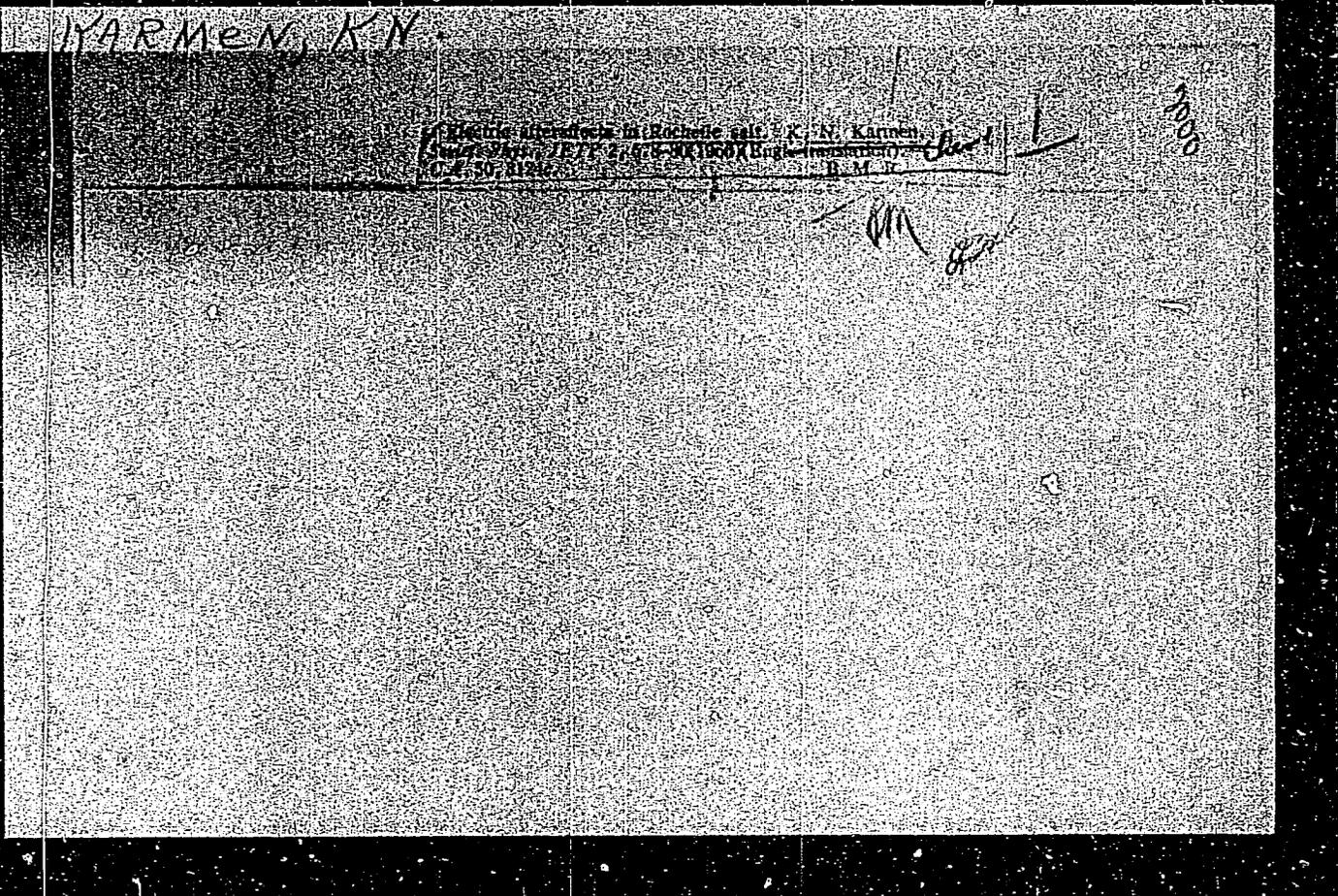
Title             : ~~Letter to the editor.~~ Electrical after-effects in Rochelle salt

Periodical        : Zhur. eksp. i teor. fiz., 29, Oct 1955, 533-534

Abstract          : The author studies the dependence of charge-discharge quantities of electricity upon the duration of field action for  $E = 75$  volt/cm, and  $T = 18^{\circ}\text{C}$ . He also studies the dependence of these quantities upon the number of impressed impulses and upon their increment for  $E = 75$  volt/cm and  $T = 18^{\circ}\text{C}$ . Seven references: e.g. K. N. Karmen, *ibid.*, 26, 370, 1954; M. S. Kosman, *ibid.*, 19, 899, 1949.

Institution       : Shakhtinskiy State Pedagogic Institute

Submitted        : November 6, 1954



24 (3)

SOV/112-59-1-149

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 1, p 16 (USSR)

AUTHOR: Karmen, K. N., and Stetsyuk, L. F.

TITLE: Dispersion of the Permittivity of Barium Titanate in the Audio-Frequency Range

PERIODICAL: Uch. zap. Shakhtinsk. gos. ped. in-t, 1957, Vol 2, Nr 3, pp 42-48

ABSTRACT: For considerable-loss conditions in a scheme used for dielectric-hysteresis curve plotting, the value of the resistor connected in parallel with the reference capacitor was selected on the basis of similarity between the hysteresis curves obtained by ballistic and oscillographic methods. For a field intensity within 2,000-500 v/cm and the sample thickness of a few tenths of mm, the  $\Delta\epsilon/\epsilon$  value is about 20% within the frequency range 20 -  $2 \times 10^4$  cps. If graphite electrodes are laid upon a ground-surface sample, the value of  $\epsilon$  increases in a few minutes; however, with higher frequencies this value quickly falls off and can amount to 60% at 5 kv/cm. For a few days,  $\epsilon$  would gradually

Card 1/2

SOV/112-59-1-149

Dispersion of the Permittivity of Barium Titanate in the Audio-Frequency Range

decrease approaching its initial value. A more rapid fall-off of  $\epsilon$  with rising frequency also occurs with higher field intensities (up to 12 kv/cm). The value is associated with both domain structure and next-to-electrode layer conditions; it also depends on the preceding state of the ferroelectric.

Bibliography: 8 items.

D. M. K.

Card 2/2

KARMEN, K.N.

AUTHOR: DOBRER, E.K., KARMEN, K.N. PA - 2540  
TITLE: Some Peculiarities of Piezoeffect in Barium Titanate under  
Static Conditions. (Nekotoryye osobennosti p'ezoeffekta titanata  
bariya v staticheskom rezhime, Russian)  
PERIODICAL: Zhurnal Tekhn.Fiz., 1957, Vol 27, Nr 3, pp 508-512 (U.S.S.R.)  
Received: 4 / 1957 Reviewed: 5 / 1957  
ABSTRACT: A large number of polycrystalline barium titanate samples as well as  
several solutions of barium titanate with the oxides of Pb, Ca, Sn  
and Mg were investigated. The samples had burnt-in metallic  
electrodes and had previously been polarized in the constant electric  
field at a voltage of from 5 to 20 kV during 10 to 120 min.  
Mechanical stresses were produced by means of a lever, on which  
occasion maximum friction losses did not exceed 5%. It was possible  
to show that the piezoeffect of barium titanate has the following  
characteristic properties:  
1. The order of magnitude and the sign of piezoelectric polarization  
is determined by the values of mechanical stresses.  
2. Furthermore, they are determined by the voltage value of the  
additional electric field, i.e. they are regulated in certain domains  
by combining the direct piezoeffect with the reverse piezoeffect.  
3. The piezoeffect of some solid barium titanate solutions depends  
only little on temperature.

Card 1/2

PA - 2540  
Some Peculiarities of Piezoeffect in Barium Titanate under  
Static Conditions.  
4. In the case of some solid solutions of barium titanate the  
piezoeffect is conserved at temperatures above Curie point.  
(7 illustrations).

ASSOCIATION: Not given  
PRESENTED BY:  
SUBMITTED: 5.7.1956  
AVAILABLE: Library of Congress

Card 2/2

KARMEN, K. N.

AUTHOR: Karmen, K. N.

53-4-8/11

TITLE: Lecture Demonstrations on Seignette Electricity in the Course in General Physics (Lektsionnyye demonstratsii po segnetoelektrichestvu v kurse obshchey fiziki).

PERIODICAL: Uspekhi Fizicheskikh Nauk, 1957, Vol. 63, Nr 4, pp. 819-823 (USSR).

ABSTRACT: The growing interest for Seignette electricity has as yet not found the attention it deserves in university courses on general physics. Of the hitherto known Seignette electrical "Seignette-Salt" is best suited for purposes of demonstration. The most suitable dimensions of samples are mentioned, after which a device is described which is suited to be used as a universal holder. Also the wiring diagram necessary for the demonstration of hysteresis is given. If a certain condition, which is mentioned here, is satisfied, the distortion of the hysteresis loop may be reduced to a minimum. The curves beside the hysteresis loop proper illustrate the most important dielectric properties of Seignette electrical, especially nonlinearity. The measures and manipulations necessary for demonstrating the upper Curie point are described. The author then describes a method for the demonstration of the influence of a constant disturbing field on the polarization process. All experiments described here can be carried

Card 1/2

Lecture Demonstrations on Seignette Electricity in the Course 53-4-8/11  
in General Physics

out at the usual frequency of 50 c. The existence of a direct piezo-effect in the case of static operation can be demonstrated by means of a scheme (system) consisting of a sample and a holder, the clamps of which are directly connected with a ballistic galvanometer. In order to be easily able to demonstrate the piezo-effect in dynamic operation, the clamps of the holder are connected with an oscillograph. The inverse effect is demonstrated by reconnection of the sample with the same constant stress to the output of a sound generator. The number of experiments possible can be considerably increased ad libitum. However, even the experiments undertaken for reasons of demonstration which are described here make it possible to illustrate the principal ways of applying Seignette electrica; space-saving small condensers, transformers, donors, etc. There are 8 figures, and 3 Slavic references.

AVAILABLE: Library of Congress.

Card 2/2